











Model Number

RLK31-54/25/31/115 SET2

Retroreflective sensor

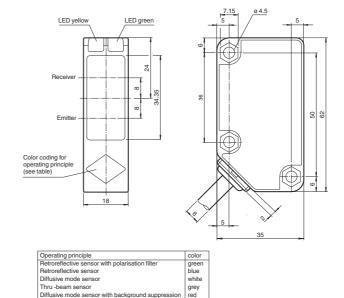
Features

- Photoelectric sensor for detecting people, objects and vehicles
- Large construction with small housing
- Not sensitive to ambient light
- Version for universal voltages
- Relay output
- Version with accessories in scope of delivery

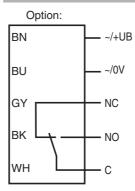
Product information

Series 31 is a range of cost-effective and, most importantly, reliable photoelectric sensors for standard applications in the fields of material handling and logistics, and for monitoring industrial doors, elevators, and automatic gates. The ultrasonic-welded plastic housing provides a high degree of protection, making these sensors ideal for tasks in harsh outdoor conditions. These sensors are currently the most compact "wide range power supply sensors" that can work with any DC and AC voltage between 24 V and 240 V. In addition to the robust technology, the sensors offer numerous product details that help the user with assembly, connection and operation.

Dimensions

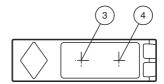


Electrical connection



Indicators/operating means





1	Operating display	green		
2	Signal display	yellow		
3	Emitter			
4	Receiver			

Technical data

General	specifications	

Effective detection range 0 ... 9000 mm Reflector distance 20 ... 9000 mm Threshold detection range 12 m reflector C110-2 Reference target

LFD Light source

Light type modulated visible red light, 630 nm Diameter of the light spot approx. 200 mm at a distance of 6 m

3 Angle of divergence Ambient light limit 50000 Lux reflector C110-2 Accessories provided

OMH-RL31-05 mounting bracket with mounting materials

Functional safety related parameters

790 a Mission Time (T_M) 20 a Diagnostic Coverage (DC) 0 %

Indicators/operating means

Operating display LED green: power on

Function display

1. LED lit constantly: signal > 2 x switching point (function

2. LED flashes: signal between 1 x switching point and 2 x swit-

china point

3. LED off: signal < switching point

Electrical specifications

24 ... 240 V AC Operating voltage U_{B} 12 ... 240 V DC No-load supply current < 40 mA I_0 Power consumption P_0 \leq 2 VA

Output

Switching type light on Signal output Relay, 1 alternator Switching voltage max. 240 V AC Switching current max. 3 A

DC: max. 150 W AC: max. 750 VA Switching power

Switching frequency 20 Hz ≤ 25 ms Response time

Ambient conditions

Ambient temperature -25 ... 55 °C (-13 ... 131 °F) Storage temperature -40 ... 70 °C (-40 ... 158 °F)

Mechanical specifications

Protection degree Connection 2 m fixed cable

Material

Housing Polycarbonate Optical face РММА Mass 154 g

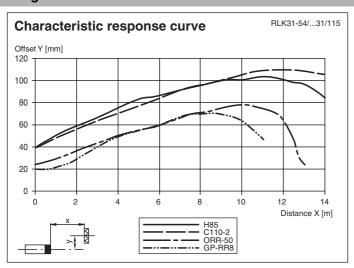
Approvals and certificates

Protection class II, rated voltage ≤ 250 V AC with pollution degree 1-2 accor-

ding to IEC 60664-1 Output circuit basis insulation of input circuit according to EN 50178, rated insulation voltage 240 V AC

CCC approval Certified by China Compulsory Certification (CCC)

Curves/Diagrams



Typical applications

- Monitoring closing edges of automatic industrial doors and elevators
- Monitoring the swing range of automatic
- Detecting and tracking objects in material handling

Detection area



Accessories

REF-H50

Reflector, rectangular 51 mm x 51 mm, mounting holes, fixing strap

REF-H60-2

Reflector with mounting holes

REF-H85-2

Reflector, rectangular 84.5 mm x 84.5 mm, mounting holes

REF-H160

Reflector, rectangular 60 mm x 18 mm, mounting holes

REF-H180

Reflector, rectangular 180 mm x 40 mm, mounting holes

REF-C110-2

Reflector, round ø 84 mm, central mounting hole

OFR-100/100

Reflective tape 100 mm x 100 mm

Reflector Weather Cap

Weather hood for series reflector

Other suitable accessories can be found at www.pepperl-fuchs.com

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